

and *striatula*, which are considered identical with D'Orbigny's *S. costata* and *elegans*. I believe the whole six are varieties of one species; and at all events the type of Mr. Jeffreys' new genus is a typical *Scissurella*. There is some difficulty about the species called *elator* and *concinna* in Sowerby's 'Genera of Shells,' but they are probably synonymous with some of the varieties before described: there is no species of *Scissurella* in the "Calcaire grossier," nor any *extinct* species known, as I told Mr. Jeffreys before he published his article.

If the genus *Scissurella* was incompletely described by M. D'Orbigny in 1823, it was certainly made good by Mr. G. Sowerby in 1824; and my friend Mr. Henry Adams, to whom I have submitted the question, quite agrees with me, that we have no alternative but to regard Mr. Jeffreys' new genus as an *exact synonym* of *Scissurella*.

Should it prove that in the British *Scissurella crispata*, and some others, the slit is never closed, Mr. Jeffreys may reimburse himself by proposing a new name for this section. It is true that Philippi, Adams, and M'Coy have adopted Montfort's name *Anatomus*, but without sufficient reason; for the "*Anatomus Indicus*" is represented like a *Skenea*, or *Valvata spirorbis*, and the slit is in the *lower margin* of the lip: it may be the fry of a Nucleobranch, or altogether apocryphal.

The name *Pleurotomaria* (Defrance, 1821) has better claims, and a species is really found in the Paris basin; but it is a large *pearly* shell, and I think Prof. Forbes was right in hesitating to associate with it the little translucent *Scissurella*.

S. P. WOODWARD.

Barnsbury, April 1856.

XXXVII.—On the Occurrence of the Fossil Genus *Conoteuthis*, D'Orb., in England. By S. P. WOODWARD, F.G.S.

THE rich collection of Mr. Bowerbank contains a specimen of *Conoteuthis*, obtained by himself from the Gault of East-ware Bay, Folkestone. It is an oblique, chambered cone, curved rather suddenly near the apex, and measures 6 lines in diameter by the same in height. The dorsal side is 8 lines in length, and has a slight ridge towards which the lines of growth are curved, and become longitudinal, showing that when perfect there was a projecting process on this side. The *septa* have simple margins, and the last eight occupy a space of four lines; the apex is not solid.

The type of this genus, *C. Dupinianus*, D'Orb., occurs in the Lower Greensand (*Aptien*) of France; it is of the same size, but

slenderer, and less curved than the English specimen. It has a ventral *siphuncle* like the Belemnite, and is supposed to have been attached to a style more than 6 inches in length, like the appendix to the pen of many Calamaries.

The plate illustrating *Conoteuthis* is wanting in most copies of the 'Paléontologie Française,' but occurs in the 'Mollusques Vivans et Fossiles' of the same author, and one of the figures is copied in my Manual, pl. 2. f. 9.

XXXVIII.—On the Development of the Freshwater Sponges.

By N. LIEBERKÜHN*.

THE structures hitherto recognized as belonging to the freshwater Sponges are the following:—The skeleton, consisting of siliceous needles of various forms; the gelatinous substance; the so-called gemmules, which are furnished with a pore, and are either surrounded by a smooth shell, or by a ring of amphidisks†; moveable bodies occurring at certain periods of the year, and effecting the propagation of the sponges: according to Hogg, these move by an endosmotic process; according to Laurent, by cilia. Grant has described similar bodies in the marine sponges, ciliated in front, but not behind; Quekett was unable to confirm this observation, and gives a totally different account of the propagation. Huxley has described spermatozoa in *Tethya*, and Carter in *Spongilla*.

The following observations have been made almost exclusively upon specimens of *Spongilla fluviatilis*, which I examined almost daily in the fresh state during two summers and a winter. They are very common in the river Spree at Berlin, especially upon old wooden posts, and at the bottom of the water.

Skeleton and Gelatinous Substance.—The siliceous spicula have been frequently described, both in their common and unusual forms (see Dujardin's work upon the Infusoria, and Ehrenberg's 'Mikrogeologie'). Meyen states that their ends are connected together by a delicate colourless siliceous mass. I have found this formation, especially in dead sponges, upon which however gemmules and young sponges are often situated; but the connecting material is not silica, for it is destroyed by a red heat, the needles and amphidisks being left. The needles are usually so arranged that several form a rod, the apex of which is applied to the apex of similar rods at an obtuse angle.

* From Müller's Archiv, 1856, i.

† The term *Amphidiscus* was applied by Ehrenberg to a supposed genus of Infusoria, consisting of bacillar spicules of sponges with discoidal ends.